BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 1500000.00

Name of Work: Detailed Estimate for the work of Construction of RO plant in ward no -04.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	A) CIVIL WORK								
1	KSRB 2-1 1 Earth work in surface excavation in hard soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1 5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications, Specification No KBS 2 1(a) / 2 3 1,P No 5/ Item No 2 2/ PWD SR 2018-19	cum							
	levelling and lowering		1	5 00	5 00	0.40	10 00		
							10.00	**376.92**	**3769.00**
	Basic Rate	349 00							
	Area Weightage 8%	27 92							
	Grand Total	376 92							
2	KSRB 2-2 2 Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1 5m and above in width, in hard soil not exceeding 1 5m , in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m specification, specification No. KBS 2 1(b) / 2 3 5, No 5/ Item No 2 4/ PWD SR 2018-19	cum							
	for RO plant ssm		2	5 10	0 90	0.90	8 26		
			2	2 80	0 90	0.90	4 54		
	RWT		2	3 20	0 75	0.90	4.32		
			2	1.70	0 75	0.90	2 30		
							19.41	**484.92**	**9414.00**
	Basic Rate	449 00							
	Area Weightage 8%	35 92							
	Grand Total	484 92							

to	Amount
.56	2575.00
5510.16	21804.00

No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	4.00	3.50	0.45	6.30		
			1	2.00	2.00	0.45	1.80		
							8.10	217.08	1758.00
	Basic Rate	201.00							
	Area Weightage 8%	16.08							
	Grand Total	217.08							
6	KSRB 5.2.3 Providing and constructing granite / trap / basalt rubble stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m apart in each course including cost of materials, labour, curing complete as per specifications KBS 5.1.13 Page No. 23/ Item No. 5.6/ PWD SR 2018-19	Cum							
			2	4.95	0.75	0.40	2.97		
			2	2.95	0.75	0.40	1.77		
			2	4.80	0.60	0.40	2.30		
			2	3.10	0.60	0.40	1.49		
	rwt		2	3.10	0.60	0.40	1.49		
			2	1.85	0.60	0.40	0.89		
							10.91	4963.68	54144.00
	Basic Rate	4596.00							
	Area Weightage 8%	367.68							
	Grand Total	4963.68							
	KSRB 5.3-3 Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour curing complete as per specifications KBS 5-1.13 Page No. 26/ Item No. 5.9/ PWD SR 2018-19	Cum							
			2	4.65	0.45	0.45	1.88		
			2	3.25	0.45	0.45	1.32		
	rwt		2	2.90	0.45	0.45	1.17		
			2	2.00	0.45	0.45	0.81		
							5.18	5921.64	30698.00
	Basic Rate	5483.00							
	Area Weightage 8%	438.64							
	Grand Total	5921.64							
	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. Page No. 112/ Item No. 15.1 PWD SR 2018-19	sqm							
			2	4.65		0.400	3.72		
			2	3.25		0.400	2.60		
			2	2.90		0.400	2.32		
			2	2.00		0.400	1.60		

Sl No	Description of item	Unit	No	L	B	D			Amount
							10.24	152.28	1559.0
	Basic Rate	141.00							
	Area Weghtage 8%	11.28							
	Grand Total	152.28							
9	KSRB 4.2.2 Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @0.459cum with superplastesizer @ 3lts conforming to IS9103-1999Reffirmed 2008 machine mixed exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls(any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or facing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc. including cost of all materials, labour HOM of machinery, curing, complete as per specifications Specification No. KBS 4.1.4.6 No. KBS 4.1.4.6, No. 13 Item No. 4.11, PWD SR 2018-19	Cum							
	for copping		2	4.65	0.45	0.10	0.42		
			2	3.25	0.45	0.10	0.29		
			2	2.90	0.45	0.10	0.26		
	nwl		2	2.00	0.45	0.10	0.18		
	inside		1	2.00	2.00	0.10	0.40		
	for chajja		1	4.00	3.50	0.10	1.40		
			1	4.40	0.60	0.10	0.26		
	for lintel		2	0.75	0.60	0.10	0.09		
			2	4.40	0.20	0.100	0.18		
			2	3.50	0.20	0.100	0.14		
	Basic Rate	5659.00							
	Area Weightage 8%	452.72							
	Grand Total	6111.72					3.62	6111.72	22137.00
10	KSRB 4-6.10 Providing and removing centering, shuttering, strutting, propping etc. for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specifications Specification NO KBS 4.6.2 Page No 16/ Item No. 4.37/ PWD SR 2018-19	sqm							
	chaja		1	4.40		0.600	2.64		
			2	0.75		0.600	0.90		
	lintel		4	4.40		0.200	3.52		
		2x2	4	3.50		0.200	2.80		
		2x2					9.86	348.84	3440.00

Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
Basic Rate	323.00							
Area Weightage 8%	25.84							
Grand Total	348.84							
RB 5-14 Providing and structing precast concrete solid cks with compressive strength les than 35 Kg/sqm with cement rtar 1:4 masonry (quoin, Jamb, ser blocks) with solid concrete cks of size 40x20x20 cms forming to I.S 2185/1965 in perstructure including cost of lerials, labour charges, liffolding, curing complete as per cifications Page No. 25/ Item 5.27/ PWD SR 2018-19	sqm							
		2	4.40		2.50	22.00		
		2	3.50		2.50	17.50		
spel		1	4.40		0.60	2.64		
		2	3.70		0.60	4.44		
						46.58		
duction Ventilator		2	0.75		0.60	0.90		
		1	2.50		2.50	6.25		
						7.15		
						39.43	**984.96**	**38837.00**
Basic Rate	912.00							
Area Weightage 8%	72.96							
Grand Total	984.96							
RB 4.9.2 providing T.M.T steel nforcement for R.C.C work luding straightening, cutting, nding, hooking, placing in sition, lapping and / or welding erever required, tying with nding wire and anchoring to the ining members wherever cessary complete as per design s, hooks and wastage shall not e measured and paid) cost pf terials, labour, HOM of chinery complete as per cifications Specification No S 4.6.3 Page No. 17/ Item No 45/ PWD SR 2018-19	Tonne					0.24		
8kg/cum		0.065	3.62			**0.24**	76643.28	**10000.00**
Basic Rate	70966.00							
Area Weightage 8%	5677.28							
Grand Total	76643.28							

Sl No	Description of Item	Unit	No	L	B	H			
13	KSRB 15.3.1 Providing 12mm thick cement plaster in single coat with cement mortar 1:6 to brick masonry including rounding off corners wherever reuired smooth rendering Prowding and removing scaffolding including cost of materials labour Curing complete as per specifications Page No 122/ Item No 15.11/ PWD SR 2018-19	sqm							
	inside		2	3.50		2.50	17.50		
			2	4.00		2.50	20.00		
			2	4.40		3.00	26.40		
	out side		2	3.90		3.00	23.40		
							87.30		
	deduction Ventilator	2x2	4	0.75		0.60	1.80		
			2	4.40		0.60	5.28		
							7.08		
							80.22	**208.44**	**16721.00**
	Basic Rate	193.00							
	Area Weightage 8%	15.44							
	Grand Total	208.44							
14	FIXTURES for doors and windows Page No XIV SR 2018-19								
	VENTILATORS Sl No 385 386 402 386								
	Hinges 5" heavyduty	Each	4	4			16	37.00	592
	bottom lock nail	Each	4	5			20	47.00	940
	MS Clamps	Each	4	4			16	38.00	608
	Brass screws 25mm	Each	20	5			100	2.10	210
15	Providing and fixing single shutter glass door of 12mm thick plain Toughened glass (Saint Gobain Modi float) The door is fixed by using any approved make hardware fitting like patch fitting pivot Floor machine locking arrangements and suitable SS door rails with Floral glass etching for 1/3 portion of door area etc complete The rate includes cost of all materials labour hire of tools & machineries and as per specification Page No 310/ Item No 39 5PWD / PWD SR 216-17	sqm	1	2.00		2.10	4.20		
	Basic Rate	8936.00					**4.20**	9650.88	40534.00
	Area Weightage 8%	714.88							
	Grand Total	9650.88							

	Unit	No	L	B	D	Qty	Rate	Amount
...ding and fixing Special make ...ed Vitrified tiles (Granomite ...e) of approved make, quality and ...our of sized 6000x600x10mm ...k fixed on existing flooring wit ha ...ecial roffe adhesive for flooring ...d skirting etc., complete including ...ding spears at required interval ...d removing stains etc., complete. ...ge No 104/ Item No. 14 44 / ...D SR 2018-19	sqm							
		1	4.00		3.50	14.00		
Basic Rate	1035.00					**14.00**	**1117.80**	**15649.00**
Area Weightage 8%	82.80							
Grand Total	1117.80							
SRB 14 13.1 Providing precast ...equered mosaic tiles dark shade ...ng ordinary grey cement for ...ps and flooring, with precast ...mm thick, using marble chips of ...proved colour 7 to 10 nominal ...e laid in floors, steps and ...dings on a bed of 12mm thick ...ment mortar 1 6, mix, jointed with ...et cement slurry mix with pigment ...match the shade of tiles curing, ...bbing, polishing , oxalic acid ...sh, wax polish, including cost of ...terials, labour, HOM machinery ...mplete as per specifications. ...ge No 112/ Item No. 14.28 SR ...018-19	sqm							
		1	2.00	2.00		4.00		
						4.00	**1155.60**	**4622.00**
Basic Rate	1070.00							
Area Weightage 8%	85.60							
Grand Total	1155.60							
SRB 15-17.2 Applying priming ...oat over new wood surface and / ...r wood based surface after ...rushing with wood primer pink ...aint including preparing the ...urface after thoroughly cleaning ...f grease, dirt, and foreign matter, ...and papering and knotting ready ...x paint including cost of ...aterials, labour, complete as per ...pecifications Page No 114/ Item ...o 15 56 / PWD SR 2018-19	sqm							
		1	3.00		2.50	7.50		
		2	0.60		0.60	0.72		
						8.22	**49.68**	**408.00**
...oors								
...indow								
Basic Rate	46.00							
Area Weightage 8%	3.68							
Grand Total	49.68							

Sl No	Description of item	Unit	No	L	B	D	Qty		
19	KSRB 15-17 6 Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as per specifications Page No 118 / Item No 15 60 1 / PWD SR 2018-19								
		qty same as item no					8.22		
							8.22	**104.76**	**861.00**
	Basic Rate	97.00							
	Area Weightage 8%	7.76							
	Grand Total	104.76							
20	KSRB 15 15.1 Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth cost of materials, labour, complete as per specifications with primer Page No 113/ Item No 15.51 2 / PWD SR 2018-19	**sqm**							
		qty same as item no					8.22		
							8.22	**93.96**	**772.00**
	Basic Rate	87.00							
	Area Weightage 8%	6.96							
	Grand Total	93.96							
21	KSRB 15-16 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to given an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour complete as per specifications with primer page No 114 item No 15 53 2/PWD SR 2018-19								
		qty same as wall plastering					4.20		
							4.20	**110.16**	**463.00**
	Basic Rate	102.00							
	Area Weightage 8%	8.16							
	Grand Total	110.16							

		Unit	No	L	B	D	Qty	Rate	Amount
	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron trapezoidal profiled sheet of approved make 1060mm width (1000mm cover width), 28-30 mm crest height with cest distance of 200 mm c/c with 2ribs at the center for stiffening . The total coated thickness (TCT) of the sheet will be 0 47 mm +/- 0 02 mm tolerance Zinc –Alu alloy coating AZ 150 gsm as pe ASTM A397/A755-550 mpa steel grade 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling /self tapping screws of 25mm length to be fixed over the existing purlins rafters channel and trusses No 300/ Item No 38 30 PWD SR 2018-19	sqm							
	GI Sheet (0 5mm)		1	5 00	5 00		25 00		
			1	2 50	2 50		6 25		
							31.25	743 04	**23220.00**
	Basic Rate	688 00							
	Area Weightage 8%	55 04							
	Grand Total	743.04							
	Steel Pre fabricates structure with a 14 Guage (3)" each 60 kg including cutting and transportation complete	kgs							
772.00	M s Rectangular tubes 1 Length=35 00 kgs = 4 4x5 =22 /6 mtr per length = 4 length x 35 kgs		4	35 00			140 00		
	M s Rectangular tubes (purlines) 1 Length=35 00 kgs = 8x4 =32 /6 mtr per length = 6 length x 35 kgs		3	35 00			105 00		
							245.00	95 00	23275 00
								A) TOTAL	**329010.00**
	B) Electrification,wiring and lighting etc to RO Plant								
463.00	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2X1 5Sq mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet GROUP A KPWD ELectrica SR for 2014-15								
1 No-5 No-23	2 3 1) Short point upto 3Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3				3 00	144 00	**432.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	2 3.2) Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3				3.00	215.00	645.00
	2 3.3) Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box KPWD ELectrica SR for 2014-15	Point	3				3.00	334.00	1002.00
2 P No-02 I No-1.1	Open Conduit System Supplying heavy gauge PVC conduit pipe ..... dia ..... mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc , and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws 1.1.1) 19/20mm dia 2mm thick KPWD ELectrica SR for 2014-15	mtr	5				5.00	54.00	270.00
3 P No-6 I No-2.5	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694 1990 & confirming to GTP of GROUP -A. 2.5.2) 1.5 sqmm KPWD ELectrica SR for 2014-15	Mtr	5				5.00	18.60	93.00
	2.5.1) 1 sqmm	Mtr	5				5.00	13.00	65.00
	2.5.3) 2.5 sqmm	Mtr	5				5.00	29.20	146.00
	2.5.4) 4 sqmm	Mtr	5				5.00	42.10	210.50
4 P No 3 I No-1.6	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting. Finishing with necessary cement plastering complete 1.6.3) 10"x7"x3" (254x178x76mm)	Each	1				1.00	87.00	87.00
	1.6.4) 8"x6"x3" (203x152x76mm)	Each	1				1.00	73.00	73.00
	1.6.1) 12"x12"x3" (300x300x76mm)	Each	2				2.00	116.00	232.00
5 P No 17 I No-3.9	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc. and fixing on existing wooden or metal box using N.F screws KPWD ELectrica SR for 2014-15	Sqcm	250				250.00	0.25	62.50
6 P No-18 I No-3.8	Supplying and fixing/replacing of 6/16.32Amps electrical accessories on existing switch board GROUP A KPWD ELectrica SR for 2014-15								
	3.15.1) 6Amps SP Switch	nos	2				2.00	35.00	70.00
	3.15.3) 6Amps 3 way 5 pin Socket	nos	2				2.00	53.00	106.00
	3.15.6) 6 Amps lamp holder	nos	2				2.00	48.00	96.00
	3.15.13) 16/6 Amps combined plug and socket with control switch	nos	2				2.00	268.00	536.00

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
215.00	upplying and fixing of modular switch/ ocket/stepped electronic fan regulator/ mmer/telephone socket etc on existing odular switch plate as per IS 3854 and IS 93 GROUP B 3.7.18) 1000-1200Watts mmer KPWD ELectrica SR for 2014-15	Each	1				1.00	447.00	447.00
334.00	upplying and fixing miniature circuit eakers on existing MCB distribution oards using necessary fixing materials and Type curve, indicator ON/OFF, energy ss-3 with Short circuit breaking capacity 10K and complete wiring as required nforming to IEC 60898. 16 1) 5-32Amps SP KPWD ELectrica SR 2014-15	Each	1				1.00	418.00	418.00
60	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other quipment's on the meter board using mm dia 2.90mm thick GI pipe 2.5 mtr ng buried in a pit ... The pit should be ed with equal proportion of salt and harcoal 150mm all-round the pipe to complete depth. The connection from the pe to the conduit etc., is to be established hrough GI wire of size as per ISI pecification 7.3.3 of IS 732 using 12mm ia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 22 mm dia KPWD ELectrica SR for 2014-	No	1				1.00	2727.00	2727.00
00	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers 17.1) 16Amps	Each	1				1.00	120.00	120.00
70.00	Supply patty type fluorescent tube light ting of 4' 36/40 watts fluorescent tube ting, made out of M.S sheet and stove eameled with low loss open construction opper wound ferromagnetic ballast, tarter, locking type brass contact holders mounted on double fold type sheet base ully wired for use on230 Volts A C Supply ncluding 1No 4'-36/40 Watts fluorescent ube 5) Group 'C' KPWD ELectrica SR for 2014-	Each	3				3.00	340.00	1020.00
536.00	Fixing all types and all capacities of luorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps 17.7 1) On wall / ceiling / Rafter / Girders KPWD ELectrica SR for 2014-15	Each	4				4.00	98.00	392.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13 65/1	SHORT POLES (whereas clearance between Messenger wire and ground is inadequate) a) Supplying and fixing 40mm diat 2.90 thick GI pipe 1.8m long complete with atleast 2 GI pipe 1.8m, long complete with atleast 2 Nos of through bolts 12 mm dia with MS back plate 100x100x6mm dia with eye bolt fixed at top deadeninding messenger wire with masonary patch work etc , complete as per approved drawing (for single phase installations) KPWD ELectrica SR for 2014-15	Each	3				3.00	525.00	1575.00
14 65/5	INSULATED CABLE ON MESSENGER WIRE Using 2 single core wires for a single phase and 4 single core wires for 3 phase Supplying and stringing PVC insulated and PVC sheathed 650/1100V class aluminium conductor of size supported by 3.15mm (10 SWG) GI messenger wire with two break insulators one at each end of the span with suspenders at intervals of 0.75m Each suspender shall be of porcelain reel insulator of suitable core through which insulated wire passes(single core or twin core as the case may be) and this reel insulator shall be fixed to the messenger wire using 2mm (No.14SWG) GI wire suitably bent and twisted Separate reely insulator shall be provided for each wire, the messenger wire shall be ded-ended on the clamp provided to the departmental pole wide item No 4 above (Page No.56 item No 5 a)Single Phase using 2 Wire e) 16 Sqmm KPWD ELectrica SR for 2014-	R mtr	20				20.00	85.00	1700.00
	BESCOM DEPOSIT CHARGE								5000.00
								B) TOTAL	17525.00

C) 10000LPD R. O Plant Quotation

RAW WATER PUMP :	
Quantity	1 No
Type	Centrifugal mono block
MOC & Make	UKL
Motor Rating	0.75 HP
PRESSURE SAND FILTER :	
Quantity	1 No
Capacity	1000 LPH
MOC & Make of housing	UKL
MOC & Make of cartridge	UKL
Capacity	1000 LPH
MOC & Make of vessel	UKL
Diameter	400 mm
Type of Valve	Single - multiport
Media	Support bed + sand

Rate	Amount
25 00	1575.00
0	1700.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Storage drinking / potable water 5000liters capacity		1	946000.00					
							C) TOTAL		946000.00
	BBMP Approved Rate								
							TOTAL A+B+C		1292535.00
							Sub Total		1292535.00
							GST 12%		155104.20
							KRIDL charges 4%		51701.40
									659 40
27	Miscellaneous charges							Total	1500000.00

(Rupees Fifteen lakhs Only)

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C S.R. of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits

Assistant Engineer

Assistant Executive Engineer
Yelahanka satellitetown Sub Division
Bangalore-64

Executive Engineer
Yelahanka Division
Bangalore-64

Administrative Approval

Accorded For Rs 15 Lakhs only
Head of A/C. P.3445
CER NO :...32..... Dt: 09.05.2019

TA CE (YNK)

TECHNICALLY SANCTIONED FOR Rs. 15.00 Lakhs
Rupees Fifteen Lakhs Only
Under P.3445 - 2018-19
Registered as CE ( ) No. 99
Subject to conditions contained in enclosed memo EE ( ) No. /91
Dt. GC/YNK/EE/08/19-20 Estimate AV Sanctioned
Dated 30.5.19 Rs. 15.00 Lakhs

Executive Engineer